

REMARKS

1. The Office Action dated March 13, 2002, has been received and its contents carefully considered. Reconsideration is requested in view of the amendments and remarks presented herein. Claims 1-46 are pending; no claim is amended by this paper.

RECEIVED
JUN 18 2002
TECH. CENTER 1600/2900

Amendment to the Specification:

2. The specification has been amended to correct an obvious error. Specifically, in Example 2, at page 23, the disclosure has been corrected to read that compositions 1 to 6, which are not transparent, are not stable either, and that compositions 7 to 11, which are transparent, are also stable. Support can be found throughout the specification and claims as originally filed, including page 3, lines 8-14, which disclose that "by using a specific washing base and at least one aminated silicone having an amine number greater than or equal to 0.4 meq/g and of the formulae (I) and (IV) set forth herein, it is possible to obtain stable and transparent detergent compositions exhibiting excellent cosmetic properties..." (Emphasis added). Accordingly, no new matter has been added by this amendment.

Rejection Under the Doctrine of Obviousness-Type Double Patenting:

3. Claims 1-46 stand rejected under the doctrine of obviousness-type double patenting over the claims of U.S. Patent Nos. 6,028,041, 6,159,914, 6,162,424, and 6,290,944 and copending Application No. 09/759,165. (Office Action, pgs. 2-3.) Applicants respectfully disagree with and traverse the rejection.

4. As an initial matter, Applicants confirm that all of the listed patents were commonly owned at the time the present invention was made. Each of these patents

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

has, at all times in its prosecution history, been assigned to L'Oréal, the current common assignee.

5. In making the obviousness-type double patenting rejections, the Examiner asserts that the claims of the present invention are drawn to hair compositions "analogous" to those of the referenced patents and copending application. (Office Action, pg. 3, Ins. 20-22, 25-27.) However, "analogous" is not the standard for an obviousness-type double patenting. Rather, the "analysis employed in an obviousness-type double patenting rejection parallels the guidelines for analysis of a 35 U.S.C. 103 obviousness determination... [and] the factual inquiries set forth in *Graham v. John Deere Co.*... are employed when making an obvious-type double patenting analysis." M.P.E.P. § 804. Since the Office has based its rejections on an improper standard ("analogous"), the rejections are legally flawed and should be withdrawn.

6. Moreover, the claims of the referenced patents and application do not teach or suggest an amphoteric/anionic surfactant ratio, as required by the present claims. Accordingly, since an obviousness-type double patenting rejection requires a teaching or suggestion of all the claimed elements (M.P.E.P. §§ 804, 2143), and the claims of the cited patents and application do not teach or suggest all the limitations of the presently claimed invention, the rejections are in error and should be withdrawn.

7. Accordingly, reconsideration and withdrawal of the double patenting rejections are respectfully requested.

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

Rejection Under 35 U.S.C. § 112, Second Paragraph:

8. Claim 34 is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for the asserted reason that the phrase "quaternary derivatives of cellulose ether" is vague and indefinite. (Office Action, pg. 4, Ins. 5-11.) According to the Office, "[i]t is not known what compounds are encompassed by this phrase. The specification does not define this phrase and one of ordinary skill in the art would not be apprised of it." (Office Action, pg. 4, Ins. 9-11.) Applicants respectfully disagree with and traverse the rejection.

9. The term "quaternary derivatives of cellulose ether" is a standard term of art that would be readily understood by one skilled in the art. For example, the term is explained in detail in U.S. Patent No. 4,240,450 (the '450 patent) at col. 4, ln. 20 - col. 5, ln. 23. (A courtesy copy of U.S. Patent No. 4,240,450 is enclosed for the Office's convenience.) As evidenced by this document and contrary to the Office's allegation, one of ordinary skill in the art would be apprised of its meaning. Note that the '450 patent issued with this explanation of the term more than 20 years ago and has been available to one skilled in the art for the entirety of that period. Note further that the '450 patent is the U.S. equivalent of F.R. Patent No. 2,383,660, which is expressly incorporated by reference in the present application at page 16, lines 7-9.

10. Moreover, "JR 400" from Union Carbide Corporation is provided in the present specification as a specific example of a "quaternary derivative of cellulose ether." See page 16, lines 13-16. Enclosed for the Office's convenience are courtesy copies of (1) a data sheet for Union Carbide Corporation's "JR 400" product, which is identified with the INCI name of polyquaternium-10, and (2) C.T.F.A. International

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

Cosmetic Ingredient Dictionary entry for polyquaternium-10, which is defined as "a polymeric quaternary ammonium salt of hydroxyethyl cellulose reacted with a trimethyl ammonium substituted epoxide."

11. When examining a claim, the Office is required to analyze the [d]efiniteness of claim language... not in a vacuum, but in light of: (A) The content of the particular application disclosure; (B) The teachings of the prior art; and (C) The claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made." M.P.E.P. § 2173.02. Accordingly, given that the present specification discloses a specific example ("JR 400"), and also incorporates FR 2,383,660 by reference, and that the term "quaternary derivatives of cellulose ether" is known in the art (see, e.g., the '450 patent), Applicants respectfully submit that the scope of the invention is defined with a "reasonable degree of certainty," as required. *Id.* According, this rejection under 35 U.S.C. § 112, second paragraph, is in error. Reconsideration and withdrawal of the rejection are respectfully requested.

Rejections Under 35 U.S.C. § 102(e):

12. Claims 1-32 and 34-46 are rejected under 35 U.S.C. § 102(e) as anticipated by each of U.S. Patent No. 6,028,041 to Decoster et al. (Decoster '041) and U.S. Patent No. 6,159,914 to Decoster et al. (Decoster '914). (Office Action, pg. 5, ln. 1 to pg. 6, ln. 2.) Applicants respectfully disagree with and traverse the rejections.

13. First, neither of the Decoster references discusses the presently claimed amphoteric/anionic surfactant ratio. The Office argues that each Decoster reference exemplifies a composition containing both the anionic surfactant sodium lauryl ether

sulfate (14g for '041, 15.5g for '914) and the amphoteric surfactant Miranol C2M (4.6g for '041, 3.2g for '914). (Office Action, pg. 5, Ins. 9-11; pg. 5, ln. 21 - pg. 6, ln. 2.)

However, while the example compositions also include an aminosilicone, specifically amodimethicone sold as FLUID DC 939 by Dow Corning, they do not include an aminosilicone according to the presently claimed invention. (Decoster '041, col. 16, ln. 21-22; Decoster '914, col. 9, ln. 62-62, col. 10, ln. 27-28.) In particular, Applicants note that the FLUID DC 939 contained in the Decoster compositions has an amine number of <0.1 meq/g (see page 23, line 4 of the present application), which is not greater than or equal to 0.4 meq/g, as required by the present claims (see, e.g., Claim 1, ln. 5-7).

14. Accordingly, at least in view of the fact that the Decoster references fail to teach or suggest a composition comprising the claimed surfactant ratio and an aminosilicone having an amine number of greater than or equal to 0.4 meq/g, the references fail to teach "[t]he identical invention... in as complete detail as is contained in the... claim" and, necessarily, fail to anticipate the presently claimed invention.

Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236 (Fed. Cir. 1989).

Reconsideration and withdrawal of the rejections are respectfully requested.

Rejections Under 35 U.S.C. § 103(a):

15. The Office has rejected all the pending claims under 35 U.S.C. § 103 over various combinations of references. As discussed further below, each of the specific rejections is deficient and should be withdrawn.

A. Initial Discussion Regarding Unpredictability of the Art

16. A prima facie case of obviousness requires that evidence of a reasonable expectation of success be found in the art. See, e.g. *In re Vaeck*, 20 U.S.P.Q.2d 1438,

1442 (Fed. Cir. 1991). The Examiner alleges at page 12, lines 8-13, of the Office Action that the results "would be expected from the prior art." However, all the present rejections under section 103 are flawed since, as will be discussed below, the art at issue is unpredictable and thus provides no reasonable expectation of success. See *Id.* at 1443 ("evidence of uncertainty... tends to rebut" an obviousness rejection).

17. Specifically, the results disclosed on pages 20-23 of the present specification show that the art is unpredictable, hence defeating a prima facie case of obviousness for want of a reasonable expectation of success. For example, the evidence based on a comparison of 11 tested compositions shows that those having an aminosilicone with an amine number of greater than or equal to 0.4 meq/g surprisingly resulted in stable, transparent compositions. Further, expert testing, disclosed on page 21 of the specification, found that hair treated with a composition according to the present invention disentangles more readily and is softer and smoother than hair treated with a composition having an amphoteric/anionic surfactant ratio of less than 0.2:1. Applicants submit that there is no basis of record to predict such results. Indeed, the unpredictability evidenced by these results shows that, but for hindsight based on the disclosure of the present application, there is no reasonable expectation of success for the Office's proposed substitutions and combinations.

18. It should be noted that the Office apparently has previously considered this data and argument under an incorrect standard. Specifically, the Office stated that "[i]t is applicant's burden to demonstrate unexpected results...." (Office Action, pg. 12, ln.1.) This is legally incorrect. To the contrary, "[t]he examiner bears the initial burden of factually supporting any prima facie conclusion of obviousness. If the examiner does

not produce a prima facie case, the applicant is under no obligation to submit evidence of nonobviousness." M.P.E.P. § 2142 (emphasis added).

19. By providing the evidence of unpredictable results contained in the present specification, Applicants have shown that there is no reasonable expectation of success and that, for at least this reason, the Office has failed to establish a prima facie case of obviousness with any of the cited combinations of references. Accordingly, each of the rejections under section 103 is deficient for want of a reasonable expectation of success.

B. WO 96/03155 in view of U.S. Patent No. 5,567,428 to Hughes in further view of U.S. Patent No. 5,476,649 to Natio.

20. Claims 1-46 are rejected under 35 U.S.C. § 103(a) as unpatentable over WO 96/03155¹, for which the Examiner is relying on U.S. Patent No. 6,162,423 to Sebag (Sebag) as a translation, in view of U.S. Patent No. 5,567,428 to Hughes (Hughes) in further view of U.S. Patent No. 5,476,649 to Natio (Natio). (Office Action, pg. 6, ln. 3- pg. 8, ln. 6.) For at least the following independent reasons, Applicants respectfully disagree with and traverse the rejection.

¹ Applicants note that WO 96/03155, which is cited in the Office Action at pg. 6, ln. 1-12, is related to contrast mediums for imaging the liver, and is unrelated to U.S. Patent No. 6,162,423 to Sebag. Applicants have proceeded under the presumption that the intended citation was WO 98/03155. However, confirmation for the record of the intended citation is respectfully requested. Moreover, should the Office continue to dispute the patentability of the presently claimed invention over WO 98/03155, Applicants submit that the next Office Action should be non-final, since there is no rejection of record based on WO 98/03155.

21. The Office has cited Sebag Example 1 as "a shampoo comprising imidazoline-based amphoteric surfactant and sodium lauryl ether sulphate (anionic surfactant) in [the claimed] ratio..." (Office Action, pg. 6, ln. 22-23.) The Office does not cite Sebag for teaching an aminated silicone having an amine number of greater than or equal to 0.4 meq/g, as more specifically set forth in the pending claims. Instead, the Office argues that

[i]t would have been obvious... to substitute the alkylamino substituted silicones of Hughes for the aminated silicones of Sebag et al. because a) both reference teach cosmetic compositions for use on hair; b) both references teach aminated silicones as active agents, c) Hughes teaches his aminated silicones as increasing style hold strength of hair and as decreasing drying time; hence, the replacement of one for the other for cosmetic purposes would be within the skill of one in the art.

(Office Action, pg. 7, ln. 15-20.) However, as discussed below, the Office's proposed motivation is unsupported by and contrary to the teachings of the references.

- 1) There would have been no motivation to substitute Hughes's alkylamino substituted silicones for Sebag's silicones, which are disclosed for a separate and independent function.

22. The Office has proposed substituting the silicones of Sebag with the alkylamino substituted silicones of Hughes, and further adding 18-methyleicosanoic acid from Natio. (Office Action, pg. 7, ln. 15 - pg. 8, ln. 6.) As motivation, the Office asserts that the alkylamino substituted silicones of Hughes are taught to provide increased hold strength and decreased drying time. (Office Action, pg. 7, ln. 15-20.) However, there would have been no motivation to make the proposed substitution of (1) Hughes's alkylamino substituted silicones for (2) Sebag's silicones, which are disclosed for a separate and independent function.

23. Specifically, Sebag teaches using silicones insoluble in the carrier to provide keratin substances with properties of softness, sheen, and disentangling. (Sebag, col. 1, Ins. 25-28.) In contrast, Hughes teaches using aminated silicones, including alkylamino substituted silicones, as drying aids. (Hughes, col. 10, In. 32 - col. 15, In. 2.) Thus, since Hughes uses aminated silicones for a different purpose (drying aid) than Sebag uses silicones (provide softness, sheen, and disentangling), there would have been no motivation to make the proposed substitution.

- 2) There would have been no motivation to substitute Hughes's alkylamino substituted silicones for Sebag's silicones in Sebag's specific compositions.

24. Further, Sebag has not been cited for and does not provide any discussion related to an amphoteric/anionic surfactant ratio. At most the Office has cited only certain specific example compositions having both types of surfactants. (Office Action, pg. 6, Ins. 21-23, Sebag, Example 1, col. 17, In. 35-60.) In order to establish a prima facie case of obviousness, the Office would have to at least point to a motivation to make the proposed substitution of Hughes's aminated silicones for Sebag's silicones with respect to specific example compositions inherently containing the claimed surfactant ratio. The question is, for example, what is the motivation of record to modify the shampoo composition of Sebag, Example 1, which already functions as desired by Sebag? The answer is that there would have been no motivation to modify Sebag's already complete and successful composition.

25. Moreover, although the Office cites Sebag for disclosing "[p]olyorganosiloxanes containing substituted or unsubstituted amine groups," (Office Action, pg. 6, Ins. 15-16), the composition of Sebag Example 1 contains polydimethylsiloxane, which is unsubstituted with amine groups. (Sebag, col. 17, In.

*No need to
bodily
enclosure*

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

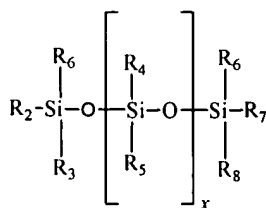
1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

52.) Accordingly, assuming for the sake of argument only (thought Applicants do not concede the point) that there is a motivation "to substitute the alkylamino substituted silicones of Hughes for the aminated silicones of Sebag et al." (Office Action, pg. 7, Ins. 15-20), the Office has not shown a basis for substituting the alkylamino substituted silicones of Hughes for the non-aminated silicones of Sebag, such as the polydimethylsiloxane of Example 1.

26. Absent such specific motivation to replace the non-aminated polydimethylsiloxane of Sebag Example 1, the Office would, at least, have to provide motivation for (1) replacing the polydimethylsiloxane of Sebag Example 1 with an aminated silicone generally, and (2) replacing that general aminated silicone with an aminated silicone having an amine number of greater than or equal to 0.4 meg/g. However, there is no sufficient teaching or suggestion of record to support this two-step motivation. Such a combination would require conducting unsupported picking and choosing, and cannot support a prima facie case of obviousness.

3) There is no motivation for picking amodimethicone from among Hughes's numerous silicone-based drying aids

27. Hughes discloses a variety of drying aids at col. 12, ln. 32 - col. 15, ln. 2. Among Hughes' preferred drying aids are polysiloxanes of the formula



with no teaching, suggestion or motivation to direct one skilled in the art to an aminosilicone within the scope of the presently claimed invention. (Hughes, col. 12,

Ins. 23-32). Hughes also mentions alkylamino substituted silicones (amodimethicone) (Hughes, col. 13, Ins. 40-56), but does not express any preference for this drying aid. Accordingly, there would have been no motivation in Hughes for picking amodimethicone from among Hughes' numerous silicone-based drying aids.

28. Moreover, even if there would have been motivation for picking amodimethicone out of Hughes' disclosure, there certainly would not have been any motivation for picking an amodimethicone having amine number of greater than or equal to 0.4meq/g. Hughes, in fact, does not teach or suggest an amodimethicone having such an amine number. Applicants remind the Office that the presently claimed invention, as set forth more specifically in, for example, claim 1, includes not merely an aminated silicone but "at least one aminated silicone having an amine number of greater than or equal to 0.4 meq/g." The Office is directed to page 9, lines 7-9 of the present specification for a further explanation of the amine number.

29. Accordingly, the Office fails to establish a prima facie case of obviousness for at least the reasons that (1) there would have been no motivation for selecting amodimethicone from Hughes's numerous drying aids, and (2) there would have been no motivation for selecting an amodimethicone having an amine number of greater than or equal to 0.4 meq/g.

4) Natio fails to overcome the deficiencies of Sebag and Hughes.

30. Natio has only been cited for the teaching of 18-methyleicosanoic acid. (Office Action, pg. 7, Ins. 12-14.) Natio has not been cited for and does not overcome the deficiencies in the rejection with respect to the motivation to combine Sebag and

Hughes. Accordingly, the references taken together do not support a prima facie case of obviousness.

31. Reconsideration and withdrawal of the rejection are respectfully requested.

C. U.S. Patent No. 6,162,424 to Decoster in view of Hughes and Natio.

32. Claims 1-46 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,162,424 to Decoster (Decoster '424) in view of Hughes and Natio. (Office Action, pg. 8, ln. 7 - pg. 9, ln. 15.) As with the rejection over Sebag in view of Hughes and Natio, the Office proposes that it would have been obvious to substitute the alkylamino substituted silicones of Hughes for the silicones of Decoster '424 for the reason that alkylamino substituted silicones of Hughes are taught to provide increased hold strength and decreased drying time. (Office Action, pg. 9, ln. 1-6.) For at least the following reasons, Applicants respectfully disagree with and traverse the rejection.

33. First, according to the Office, Example 1 of Decoster '424 discloses sodium lauryl ether sulphate as an anionic surfactant and diallyldimethylammonium chloride homopolymer as an amphoteric surfactant. (Office Action, pg. 8, lns. 15-17.) As disclosed in Decoster '424, Example 1, composition B contains 15.5g of the cited anionic surfactant and 0.6g of the cited amphoteric surfactant. The ratio by weight of the amphoteric surfactant/anionic surfactant is 0.6/15.5 or 0.04:1. In contrast, as set forth more specifically in the claims, the presently claimed composition must have an amphoteric/anionic surfactant ratio of greater than or equal to 0.2:1. Accordingly, as the secondary references have not been cited for teaching or suggesting this element, a

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

prima facie case of obviousness has not been established since the references, taken together, fail to teach or suggest all the claimed elements.

34. Second, Applicants note that, as in the case of Decoster '041 and Decoster '914, the Fluid DC 939 disclosed in Decoster '424 Example 1 does not have an amine number of greater than or equal to 0.4 meq/g. (See paragraph 13, *supra*.) Third, Decoster '424 teaches silicones to provide softness and other properties (Decoster '424, col. 1, lines 31-26), while Hughes teaches alkylamino substituted silicones as drying agents, as discussed above. Given the different uses for the silicones of the two respective references, there would have been no motivation for the Office's proposed substitution and, hence, no prima facie case of obviousness has been made. Fourth, the deficiencies of Hughes and Natio addressed in paragraphs 27 - 30 above apply to this rejection as additional reasons why the Office has failed to establish a prima facie case of obviousness.

35. Reconsideration and withdrawal of the rejection are respectfully requested.

D. Decoster in view of Natio

36. Claims 1 and 33 were rejected under 35 U.S.C § 103(a) as being unpatentable over Decoster '914 in view of Natio. (Office Action, pg. 9, ln. 16 - pg. 10, ln. 7.) Applicants respectfully disagree with and traverse the rejection. As discussed above in paragraph 13, Decoster '914 does not teach an aminated silicone having an amine number greater than or equal to 0.4 meq/g. Accordingly, since Natio has not been cited for and does not teach such an aminated silicone, the references, taken together, fail to teach or suggest all the elements of the presently claimed invention. Thus, the proposed combination fails to support a prima facie case of obviousness.

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

37. Reconsideration and withdrawal of the rejection are respectfully requested.

E. Morlino in view of Sebag and Natio.

38. Claims 1-46 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Morlino in view of Sebag and Natio. (Office Action, pg. 10, ln 8 - pg. 11, ln. 20.) Applicants respectfully disagree with and traverse the rejection. This rejection fails to establish a prima facie case of obviousness even if all the Office's assumptions were accurate (though Applicants do not agree that they are). Specifically, the Office acknowledged that both Sebag and Morlino fail to teach the claimed aminated silicones. (Office Action, pg. 6, ln. 22-23; pg. 10, ln. 19-20.) Even though Natio is not cited for and does not overcome this deficiency, the Office has rejected all the claims over this combination of references. The Office's failure to show a teaching or suggestion of all the claimed elements, including the claimed aminated silicone, is an obvious deficiency in the rejection.

39. Reconsideration and withdrawal of the rejection are respectfully requested.

CONCLUSION

40. In view of the foregoing remarks, Applicants respectfully request the reconsideration and reexamination of this application and the timely allowance of the pending claims.

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

41. Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, L.L.P.

Dated: June 13, 2002

By: 

Mark J. Feldstein
Reg. No. 46,693

Enclosures:

- U.S. Patent No. 4,240,450.
- Union Carbide Corporation's "JR 400" data sheet.
- C.T.F.A. International Cosmetic Ingredient Dictionary (4th ed.), pg. 462, entry for polyquaternium-10.

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com